

TRAIL/Apo2L
Catalog # PVGS1342**Specification**

TRAIL/Apo2L - Product InformationPrimary Accession [P50591](#)**Species**
Human**Sequence**

Val114-Gly281, expressed with an N-terminal Met

Purity> 95% as analyzed by SDS-PAGE
> 95% as analyzed by HPLC**Endotoxin Level**

< 0.2 EU/ µg of protein by gel clotting method

Biological ActivityED₅₀ < 40.0 ng/ml, measured by the cell growth inhibitory assay using RPMI-8226 cells, corresponding to a specific activity of $> 2.5 \times 10^4$ units/mg.**Expression System**

E. coli

Formulation**Lyophilized after extensive dialysis against PBS.****Reconstitution**It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.**Storage & Stability**

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

TRAIL/Apo2L - Additional Information**Gene ID** 8743**Other Names**

Tumor necrosis factor ligand superfamily member 10, Apo-2 ligand, Apo-2L, TNF-related apoptosis-inducing ligand, Protein TRAIL, CD253, TNFSF10, APO2L, TRAIL

Target Background

TRAIL/Apo2L, also known as Tumor Necrosis Factor Super-Family 10 (TNFSF10), is a pleiotropic cytokine that belongs to the TNF superfamily. The full length TRAIL expressed in vivo is a Type II transmembrane protein, although the soluble form also exists and functions. TRAIL has four major

receptors: two death receptors DR4 and DR5, two decoy receptors DcR1 and DcR2. TRAIL binds to the death receptors, recruits the FAS-associated death domain, activates caspases 8 and 10, and eventually leads to apoptosis. Because of its antitumor potential, TRAIL is actively studied as a therapeutic agent. On the other hand, abnormal expression of TRAIL in small arteries can induce the proliferation of smooth muscle cells, resulting in increasing vascular remodeling and pulmonary arterial hypertension.

TRAIL/Apo2L - Protein Information

Name TNFSF10

Synonyms APO2L, TRAIL

Function

Cytokine that binds to TNFRSF10A/TRAILR1, TNFRSF10B/TRAILR2, TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and possibly also to TNFRSF11B/OPG (PubMed:10549288, PubMed:26457518). Induces apoptosis. Its activity may be modulated by binding to the decoy receptors TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and TNFRSF11B/OPG that cannot induce apoptosis.

Cellular Location

Cell membrane; Single-pass type II membrane protein. Secreted. Note=Exists both as membrane-bound and soluble form.

Tissue Location

Widespread; most predominant in spleen, lung and prostate

TRAIL/Apo2L - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TRAIL/Apo2L - Images